

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

**Claim 1 (Currently amended):** An apparatus comprising:

a longitudinal member connectable with a bone portion;

a fastener having a longitudinal axis and engageable with the bone portion to connect said longitudinal member to the bone portion;

a housing having a first passage configured to receive said longitudinal member, said housing having a second passage with a longitudinal axis extending transverse to said first passage, said fastener extending through an opening in said housing into said second passage and being movable relative to said housing, said longitudinal axis of said fastener being positionable in any one of a plurality of desired angular positions relative to said longitudinal axis of said second passage;

a spacer received in said second passage of said housing and engageable with said fastener and said longitudinal member;

a member that applies a an axial force ~~to prevent preventing~~ relative movement between said fastener and said housing and holding said longitudinal axis of said fastener in any one of said plurality of desired angular positions relative to said longitudinal axis of said second passage when said longitudinal member is disengaged from said spacer and said spacer engages said fastener, said fastener and said housing being manually movable relative to each other against said force when said longitudinal member is disengaged from said spacer and said member applies said force; and

a clamping mechanism that clamps said longitudinal member, said spacer and said housing to said fastener to prevent movement of said fastener relative to said housing.

**Claim 2 (Currently amended):** An apparatus as defined in claim 1 wherein said member is a an axially compressible member.

**Claim 3 (Original):** An apparatus as defined in claim 1 wherein said member is a spring member engaging said housing and said spacer.

**Claim 4 (Original):** An apparatus as defined in claim 3 wherein said member includes a ring member extending into a groove in said spacer and a groove in said housing.

**Claim 5 (Original):** An apparatus as defined in claim 4 wherein said ring member has a gap to permit radial contraction and radial expansion of said ring member.

**Claim 6 (Canceled)**

**Claim 7 (Original):** An apparatus as defined in claim 4 wherein said ring member is arched when said ring member is disengaged from said housing and said spacer.

**Claim 8 (Previously presented):** An apparatus as defined in claim 1 wherein said fastener includes a first part spherical surface engageable with a part spherical surface of said housing.

**Claim 9 (Original):** An apparatus as defined in claim 8 wherein said fastener includes a second part spherical surface engageable with said spacer.

**Claim 10 (Original):** An apparatus as defined in claim 9 wherein said fastener includes a surface engageable with said spacer to limit relative movement between said fastener and said housing.

**Claim 11 (Original):** An apparatus as defined in claim 10 wherein said second part spherical surface has a diameter smaller than a diameter of said first part spherical surface, said surface engageable with said spacer to limit relative movement between said fastener and said housing extending between said first and second part spherical surfaces.

**Claim 12 (Original):** An apparatus as defined in claim 1 wherein said spacer has an opening through which a tool extends to engage said fastener when said longitudinal member is disengaged from said spacer.

**Claim 13 (Original):** An apparatus as defined in claim 1 wherein said spacer includes slots that receive a tool for inserting said spacer into said housing.

**Claim 14 (Original):** An apparatus as defined in claim 1 wherein said clamping mechanism includes a threaded member threadably engageable with said housing.

**Claim 15 (Original):** An apparatus as defined in claim 14 wherein said threaded member engages said longitudinal member to clamp said longitudinal member against said spacer.

**Claim 16 (Original):** An apparatus as defined in claim 14 wherein said threaded member and said housing have a buttress thread.

**Claim 17 (Currently amended):** An apparatus comprising:

- a longitudinal member connectable with a bone portion;
- a fastener having a longitudinal axis and engageable with the bone portion to connect said longitudinal member to the bone portion;
- a housing having a first passage configured to receive said longitudinal member, said housing having a second passage with a longitudinal axis extending transverse to said first passage, said fastener extending through an opening in said housing into said second passage and being movable relative to said housing, said longitudinal axis of said fastener being positionable in any one of a plurality of desired angular positions relative to said longitudinal axis of said second passage;
- a spring member that applies a an axial force ~~to prevent~~ preventing relative movement between said fastener and said housing and holding said longitudinal axis of said fastener in any one of said plurality of desired angular positions relative to said longitudinal axis of said second passage, said fastener and

said housing being manually movable relative to each other against said force when said spring member applies said force; and

a clamping mechanism that clamps said longitudinal member and said housing to said fastener to prevent movement of said fastener relative to said housing.

**Claim 18 (Currently amended):** An apparatus as defined in claim 1 wherein said member applies an said axial force to said spacer to prevent said fastener and said housing from moving relative to each other.

**Claim 19 (Previously presented):** An apparatus as defined in claim 18 wherein said member engages a radially extending surface on said housing and a radially extending surface on said spacer.

**Claim 20 (Previously presented):** An apparatus as defined in claim 19 wherein said radially extending surface on said housing at least partially defines a circumferential groove in said housing, said radially extending surface on said spacer at least partially defining a circumferential groove in said spacer.

**Claim 21 (Previously presented):** An apparatus as defined in claim 20 wherein said spacer includes first and second radially extending surfaces and an axially extending surface defining said groove in said spacer.

**Claim 22 (Previously presented):** An apparatus as defined in claim 4 wherein said spacer includes first and second radially extending surfaces and an axially extending surface defining said groove in said spacer.

**Claim 23 (Currently amended):** An apparatus as defined in claim 17 wherein said spring member applies ~~an~~ said axial force to said spacer to prevent said fastener and said housing from moving relative to each other.

**Claim 24 (Currently amended):** An apparatus comprising:

- a longitudinal member connectable with a bone portion;
- a fastener having a longitudinal axis and engageable with the bone portion to connect said longitudinal member to the bone portion;
- a housing having a first passage configured to receive said longitudinal member, said housing having a second passage with a longitudinal axis extending transverse to said first passage, said fastener extending through an opening in said housing into said second passage and being movable relative to said housing, said longitudinal axis of said fastener being positionable in any one of a plurality of desired angular positions relative to said longitudinal axis of said second passage;
- a spacer received in said second passage of said housing and engageable with said fastener and said longitudinal member;
- a member including means for applying a an axial force ~~to prevent and for preventing~~ relative movement between said fastener and said housing when said longitudinal member is disengaged from said spacer and said spacer engages said fastener, said member including means for permitting manual movement of said

fastener and said housing relative to each other against said force when said longitudinal member is disengaged from said spacer and said force is applied; and a clamping mechanism that clamps said longitudinal member, said spacer and said housing to said fastener to prevent movement of said fastener relative to said housing.

**Claim 25 (Currently amended):** An apparatus as defined in claim 24 wherein said member is a an axially compressible member.

**Claim 26 (Previously presented):** An apparatus as defined in claim 24 wherein said member is a spring member engaging said housing and said spacer.

**Claim 27 (Previously presented):** An apparatus as defined in claim 26 wherein said member includes a ring member extending into a groove in said spacer and a groove in said housing.

**Claim 28 (Previously presented):** An apparatus as defined in claim 27 wherein said spacer includes first and second radially extending surfaces and an axially extending surface defining said groove in said spacer.

**Claim 29 (Previously presented):** An apparatus as defined in claim 27 wherein said ring member has a gap to permit radial contraction and radial expansion of said ring member.

**Claim 30 (Canceled)**

**Claim 31 (Previously presented):** An apparatus as defined in claim 27 wherein said ring member is arched when said ring member is disengaged from said housing and said spacer.

**Claim 32 (Previously presented):** An apparatus as defined in claim 24 wherein said fastener includes a first part spherical surface engageable with a part spherical surface of said housing.

**Claim 33 (Previously presented):** An apparatus as defined in claim 32 wherein said fastener includes a second part spherical surface engageable with said spacer.

**Claim 34 (Previously presented):** An apparatus as defined in claim 33 wherein said fastener includes a surface engageable with said spacer to limit relative movement between said fastener and said housing.

**Claim 35 (Previously presented):** An apparatus as defined in claim 34 wherein said second part spherical surface has a diameter smaller than a diameter of said first part spherical surface, said surface engageable with said spacer to limit relative movement between said fastener and said housing extending between said first and second part spherical surfaces.

**Claim 36 (Previously presented):** An apparatus as defined in claim 24 wherein said spacer has an opening through which a tool extends to engage said fastener when said longitudinal member is disengaged from said spacer.



**Claim 37 (Previously presented):** An apparatus as defined in claim 24 wherein said spacer includes slots that receive a tool for inserting said spacer into said housing.

**Claim 38 (Previously presented):** An apparatus as defined in claim 24 wherein said clamping mechanism includes a threaded member threadably engageable with said housing.

**Claim 39 (Previously presented):** An apparatus as defined in claim 38 wherein said threaded member engages said longitudinal member to clamp said longitudinal member against said spacer.

**Claim 40 (Previously presented):** An apparatus as defined in claim 38 wherein said threaded member and said housing have a buttress thread.

**Claim 41 (Currently amended):** An apparatus as defined in claim 24 wherein said member includes means for applying an said axial force to said spacer to prevent said fastener and said housing from moving relative to each other.

**Claim 42 (Previously presented):** An apparatus as defined in claim 41 wherein said member engages a radially extending surface on said housing and a radially extending surface on said spacer.

**Claim 43 (Previously presented):** An apparatus as defined in claim 42 wherein said radially extending surface on said housing at least partially defines a circumferential groove in said housing, said radially extending surface on said spacer at least partially defining a circumferential groove in said spacer.

**Claim 44 (Previously presented):** An apparatus as defined in claim 43 wherein said spacer includes first and second radially extending surfaces and an axially extending surface defining said groove in said spacer.

**Claim 45 (Currently amended):** An apparatus comprising:

- a longitudinal member connectable with a bone portion;
- a fastener having a longitudinal axis and engageable with the bone portion to connect said longitudinal member to the bone portion;
- a housing having a first passage configured to receive said longitudinal member, said housing having a second passage with a longitudinal axis extending transverse to said first passage, said fastener extending through an opening in said housing into said second passage and being movable relative to said housing, said longitudinal axis of said fastener being positionable in any one of a plurality of desired angular positions relative to said longitudinal axis of said second passage;
- a spring member having means for applying a an axial force to ~~prevent~~ and for preventing relative movement between said fastener and said housing, said spring member including means for permitting manual movement of said fastener and said housing relative to each other against said force when said force is applied;
- and

a clamping mechanism that clamps said longitudinal member and said housing to said fastener to prevent movement of said fastener relative to said housing.

**Claim 46 (Currently amended):** An apparatus as defined in claim 45 wherein said spring member applies an said axial force to said spacer to prevent said fastener and said housing from moving relative to each other.

**Claim 47 (Currently amended):** An apparatus comprising:

- a longitudinal member connectable with a bone portion;
- a fastener having a longitudinal axis and engageable with the bone portion to connect said longitudinal member to the bone portion;
- a housing having a first passage configured to receive said longitudinal member, said housing having a second passage with a longitudinal axis extending transverse to said first passage, said fastener extending through an opening in said housing into said second passage, said housing being movable relative to said fastener, said longitudinal axis of said second passage being positionable in any one of a plurality of desired angular positions relative to said longitudinal axis of said fastener;
- a spacer received in said second passage of said housing and engageable with said fastener and said longitudinal member;
- a member that applies a an axial force ~~to hold~~ holding said longitudinal axis of said second passage of said housing in any one of said plurality of desired angular positions relative to said longitudinal axis of said fastener when said longitudinal member is disengaged from said spacer and said spacer engages said

fastener, said fastener and said housing being manually movable relative to each other against said force when said longitudinal member is disengaged from said spacer and said member applies said force; and

a clamping mechanism that clamps said longitudinal member, said spacer and said housing to said fastener to prevent movement of said housing relative to said fastener.

**Claim 48 (New):** An apparatus comprising:

a longitudinal member connectable with a bone portion;

a fastener having a longitudinal axis and engageable with the bone portion to connect said longitudinal member to the bone portion;

a housing having a first passage configured to receive said longitudinal member, said housing having a second passage with a longitudinal axis extending transverse to said first passage, said fastener extending through an opening in said housing into said second passage and being movable relative to said housing, said longitudinal axis of said fastener being positionable in any one of a plurality of angular positions relative to said longitudinal axis of said second passage;

a spacer received in said second passage of said housing and engageable with said fastener and said longitudinal member;

a member that applies a force to prevent relative movement between said fastener and said housing when said longitudinal member is disengaged from said spacer and said spacer engages said fastener, said fastener and said housing being manually movable relative to each other against said force when said longitudinal member is disengaged from said spacer and said member applies said force; and

a clamping mechanism that clamps said longitudinal member, said spacer and said housing to said fastener to prevent movement of said fastener relative to said housing;

said member being a spring member engaging said housing and said spacer, said member including a ring member extending into a groove in said spacer and a groove in said housing; said ring member having a gap to permit radial contraction and radial expansion of said ring member;

said spacer including axially extending slots that receive a tool for inserting said spacer and said ring member into said housing, said slots intersecting said groove in said spacer to permit engagement of said tool with said spring member to radially contract said spring member into said groove in said spacer.

**Claim 49 (New):** An apparatus comprising:

a longitudinal member connectable with a bone portion;

a fastener having a longitudinal axis and engageable with the bone portion to connect said longitudinal member to the bone portion;

a housing having a first passage configured to receive said longitudinal member, said housing having a second passage with a longitudinal axis extending transverse to said first passage, said fastener extending through an opening in said housing into said second passage and being movable relative to said housing, said longitudinal axis of said fastener being positionable in any one of a plurality of angular positions relative to said longitudinal axis of said second passage;

a spacer received in said second passage of said housing and engageable with said fastener and said longitudinal member;

a member including means for applying a force to prevent relative movement between said fastener and said housing when said longitudinal member is disengaged from said spacer and said spacer engages said fastener, said member including means for permitting manual movement of said fastener and said housing relative to each other against said force when said longitudinal member is disengaged from said spacer and said force is applied; and

a clamping mechanism that clamps said longitudinal member, said spacer and said housing to said fastener to prevent movement of said fastener relative to said housing;

said member being a spring member engaging said housing and said spacer, said member including a ring member extending into a groove in said spacer and a groove in said housing, said ring member having a gap to permit radial contraction and radial expansion of said ring member;

said spacer including axially extending slots that receive a tool for inserting said spacer and said ring member into said housing, said slots intersecting said groove in said spacer to permit engagement of said tool with said spring member to radially contract said spring member into said groove in said spacer. An apparatus as set forth in claim 1 wherein said housing and said fastener are universally pivotable relative to each other.

**Claim 50 (New):** An apparatus as defined in claim 1 wherein said housing and said fastener are universally pivotable relative to each other.

**Claim 51 (New):** An apparatus as defined in claim 50 wherein said axial force prevents said housing and said fastener from universally pivoting relative to each other.

**Claim 52 (New):** An apparatus as defined in claim 17 wherein said housing and said fastener are universally pivotable relative to each other.

**Claim 53 (New):** An apparatus as defined in claim 52 wherein said axial force prevents said housing and said fastener from universally pivoting relative to each other.

**Claim 54 (New):** An apparatus as defined in claim 24 wherein said housing and said fastener are universally pivotable relative to each other.

**Claim 55 (New):** An apparatus as defined in claim 54 wherein said axial force prevents said housing and said fastener from universally pivoting relative to each other.

**Claim 56 (New):** An apparatus as defined in claim 45 wherein said housing and said fastener are universally pivotable relative to each other.

**Claim 57 (New):** An apparatus as defined in claim 56 wherein said axial force prevents said housing and said fastener from universally pivoting relative to each other.

**Claim 58 (New):** An apparatus as defined in claim 47 wherein said housing and said fastener are universally pivotable relative to each other.

**Claim 59 (New):** An apparatus as defined in claim 58 wherein said axial force prevents said housing and said fastener from universally pivoting relative to each other.



## **SUMMARY OF INTERVIEW**

### **Exhibits and/or Demonstrations**

A model of the applicant's invention was shown.

### **Identification of the Claims Discussed**

All of the claims were discussed.

### **Identification of Prior Art Discussed**

U.S. Patent No. 6,485,491 to Farris et al.

### **Proposed Amendments Discussed**

As set forth in the Examiner's Interview Summary.

### **Principal Arguments and Other Matters**

The proposed amended claims are allowable over the art of record.

### **Results of Interview**

A Request for Continued Examination with amended claims as presented herein would be filed. The amended claims 1, 17, and 47 as presented herein appear to recite structure that distinguishes over the Farris et al. patent. Claims 24 and 45 recite structure in means plus function language that distinguishes over the Farris et al. patent.